

REMARKS

Favorable reconsideration of this application as amended is respectfully requested.

The rejection of Claims 17-21, 24, and 34 under 35 U.S.C. 102(b) as being anticipated by Duval is respectfully traversed.

Claim 34 recites:

said spline fitting portion or serration fitting portion of said male shaft and spline fitting portion or serration fitting portion of said female shaft being always in slidable contact with each other [emphasis added].

The rejection alleges that Duval discloses this feature, but, respectfully, Duval does not disclose this feature.

In Response to Arguments, the Office Action asserts that the claims do not define the structure of the sliding contact, but the recitation of "sliding contact" is sufficient in itself. If parts are always in contact with each other, they must always touch each other, because by definition, "contact" means a touching or meeting of bodies.

In Fig. 12 of Duval, projections 34 and grooves 35 are not in contact with each other, but are provided with some clearance. They are only used to transmit torque if the

balls 3 should rupture. See column 8, lines 34-38.

Clearly, then, the assertion in the rejection that the splines and serrations of the male and female shafts of Duval always being in slidable contact with each other is contrary to the specific intent of Duval. Duval may disclose a sliding arrangement, but Duval does not disclose a sliding arrangement in which parts are always in contact (i.e., touching) with each other.

In Response to Arguments, Applicant's attention is directed to Lightcap or Brown for disclosure of sliding contact, but there has been no rejection based on such disclosure. In any case, Duval specifically desires that the projections 34 and grooves 35 are not always in contact with each other, but are provided with some clearance, so that they are only used to transmit torque if the balls 3 should rupture. Eliminating this feature in Duval would be contrary to Duval's specific intent.

Accordingly, the rejection of Claims 17-21, 24, and 34 under 35 U.S.C. 102(b) is inappropriate and should be withdrawn.

Independent Claim 34 has been amended to avoid any question of applicability of Duval or Duval in combination with the secondary references relied upon in the rejections under 35 U.S.C. 103(a). Claim 34 now recites that the

elastic member of the preloading portion includes a leaf spring having opposite ends spaced in a peripheral direction of the telescopic shaft that are in contact with the male shaft and that are in contact with and that depress the rolling member from respective sides thereof along the same peripheral direction. See, for example, and without limitation, Applicant's specification at page 14, lines 8-17, and page 26, lines 7-8.

In Duval, the elastic member includes two races (130, 130) and elastic elements (134, 134) which are separate, with a rolling member (3) located between them.

According to such a structure of Duval, if torque in one direction is inputted to a drive shaft element, one of the elastic elements is depressed and moves away from the other of the elastic elements, so that an air gap is formed between the other of the elastic elements and the rolling member. If torque in an opposite direction is continuously inputted, the presence of this air gap would cause steering "feeling" to deteriorate.

In comparison, according to the invention recited in Claim 34, a leaf spring has a structure that can follow rapid change of input torque direction, and smooth steering "feeling" can be obtained even if torque input direction is rapidly changed.

The rejection of Claim 22 refers to the leaf spring (224) in Duval, but this leaf spring does not have the construction of the leaf spring recited in Claim 34, that has opposite ends that are in contact with and that depress a rolling member from respective sides thereof, as recited in Claim 34.

Furthermore, the Duval arrangement requires a larger number of parts than the invention recited in Claim 34, and assembly of these parts is not an easy matter. With the single leaf spring recited in Claim 34, assembly is easier.

In the invention recited in Claim 34, when there is relative axial movement of the male shaft and the female shaft, a smooth sliding action is obtained. When torque is transmitted, there is no feeling of any play even at an initial stage, due to the presence of the preloading portion with its leaf spring, and torque can be transmitted with a high rigidity by the torque transmitting portion formed by the spline fitting portion or serration fitting portion of the male shaft and the spline fitting portion or serration fitting portion of the female shaft, which are always in slidable contact with each other. There is no teaching or suggestion of this invention in the prior art.

For the foregoing reasons, it is respectfully submitted that this application should now be passed to issue.

The Commissioner is hereby authorized to charge to Deposit Account No. 50-1165 (XA-10284) any fees under 37 C.F.R. §§ 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been separately requested, such extension is hereby requested.

Respectfully submitted,

Date: April 27, 2009

By: Nelson H. Shapiro  
Nelson H. Shapiro  
Reg. No. 17,095

Miles & Stockbridge, P.C.  
1751 Pinnacle Drive  
Suite 500  
McLean, Virginia 22102-3833  
(703) 903-9000

NHS:ecr